



## Water and its role in food and health security--The importance of water to food production

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### Abstract:

Water is vital to food production: every calorie of plant food requires at least one litre of water, while one calorie of meat or dairy product can require up to 10 litres of water. Water is supplied either through rainfall or through irrigation. Irrigated agriculture uses 18 per cent of agricultural land, and produces 40 per cent of agricultural products. But urbanisation, agricultural land degradation, the mandating of biofuels, drought and climate change are reducing the amount of water available to agriculture. The green revolution of last century doubled cereal production with only a very small increase in land. This century we need a blue revolution, a dramatic increase in the amount of food produced from irrigation or blue water. The blue revolution must be based on knowledge, with that knowledge accessible, and useful, to farmers in both the developed and developing world.

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### Resource Description

#### Exposure :

weather or climate related pathway by which climate change affects health

Food/Water Security, Food/Water Security

**Food/Water Security:** Agricultural Productivity

#### Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

#### Geographic Location:

resource focuses on specific location

Non-United States

**Non-United States:** Australasia

#### Health Impact:

specification of health effect or disease related to climate change exposure

# Climate Change and Human Health Literature Portal

Malnutrition/Undernutrition

## **Mitigation/Adaptation:**

mitigation or adaptation strategy is a focus of resource

Adaptation

## **Resource Type:**

format or standard characteristic of resource

Review

## **Resilience:**

capacity of an individual, community, or institution to dynamically and effectively respond or adapt to shifting climate impact circumstances while continuing to function

A focus of content

## **Timescale:**

time period studied

Time Scale Unspecified

## **Vulnerability/Impact Assessment:**

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content